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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,415	02/14/2006	Piero Petrini	06008	7566

23338 7590 08/08/2007  
DENNISON, SCHULTZ & MACDONALD  
1727 KING STREET  
SUITE 105  
ALEXANDRIA, VA 22314

EXAMINER
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WISTERMAYER, ALEXIS M

ART UNIT	PAPER NUMBER
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3709

MAIL DATE	DELIVERY MODE
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08/08/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/568,415

Applicant(s)

PETRINI ET AL.

Examiner

Alexis M. Wistermayer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11/9/06.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

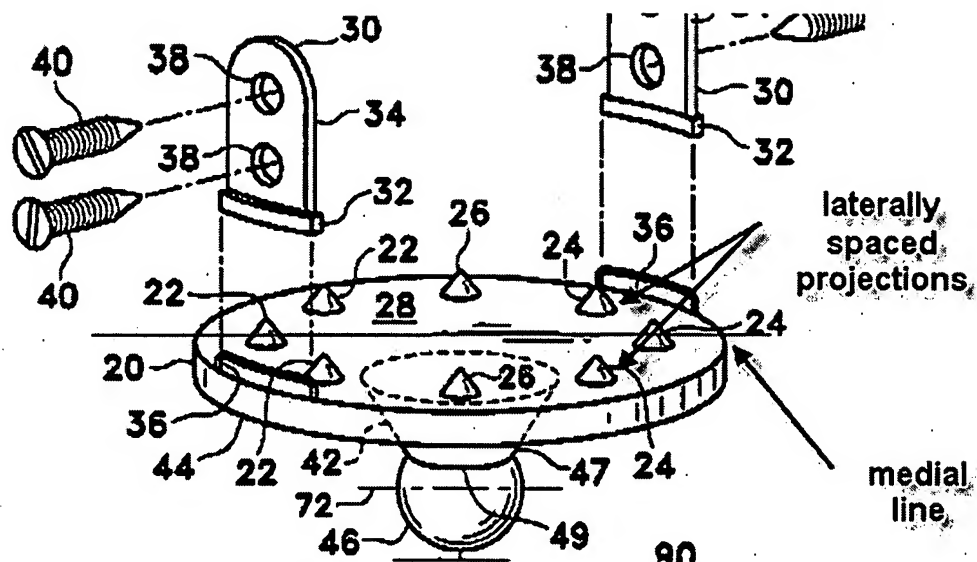
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 through 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Xavier et al (US Pat 6063121).

Regarding Claims 1 through 3: Xavier et al. teach an elastic body/disc cushion (Figure 3 Element 80) with a means of securing the elastic body (Figure 3 Elements 20, 30, and 40). The securing means comprises an anchoring plate (Figure 3 Elements 20, 30 and 32). The anchoring plate taught by Xavier et al. is made of a substantially rigid material, namely metal (Column 4 Lines 50 through 65).

Regarding Claims 4 through 7: Xavier et al. teach prosthesis: having at least three projections on each anchoring plate (Figure 3 Elements 24 attached to plate 20 and Elements 52 attached to plate 48), where, if a medial line is drawn, each plate includes a median projection and at least two laterally spaced projections, where the median projection is sufficiently thin. See drawing below of top plate member (Figure 3 in reference).



Regarding Claim 8: Xavier et al. teach prosthesis with a connection means to the aforementioned securing means (Figure 1 Element 94).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

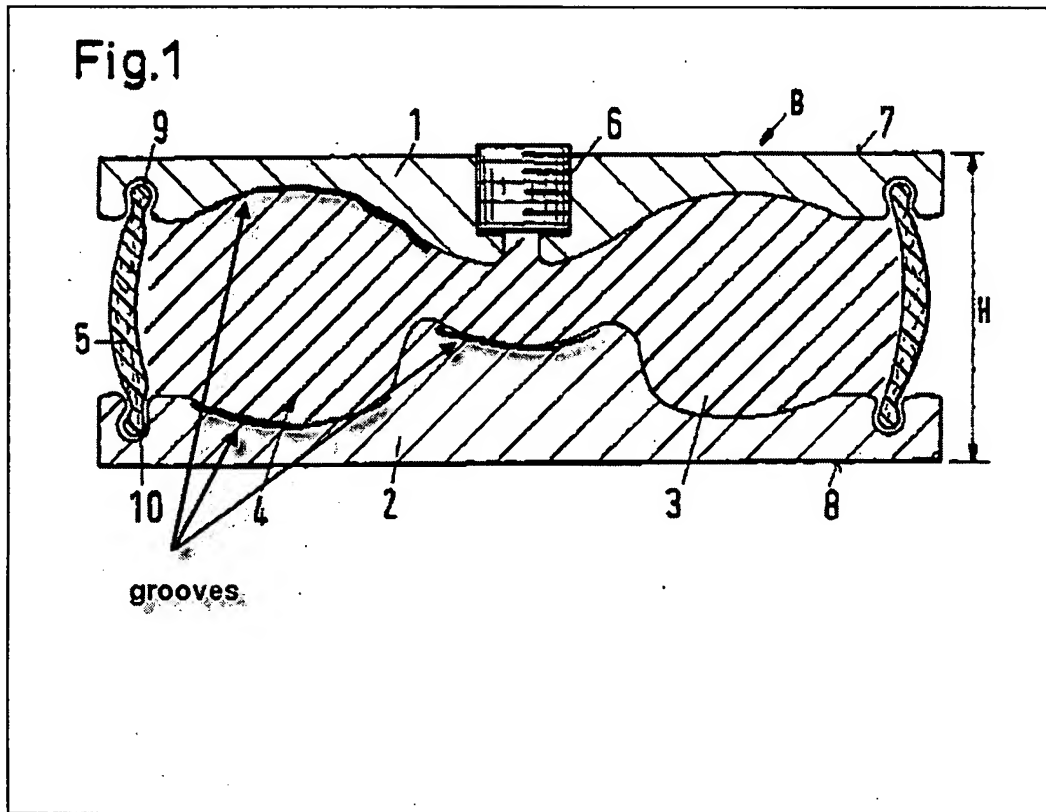
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Xavier et al (US Pat 6,063,121).

Xavier et al. teach the basic claimed device as set forth above regarding claims 1 and 8. Xavier et al. teach a prosthesis with connection means including ligatures (Column 4 Lines 20 through 45). Xavier et al. does not explicitly teach ligatures that pass through first holes provided in the anchor plates and corresponding second holes. Nonetheless, it is well known in the art that the means of connecting ligatures could be internal to the device. At the time of the invention, it would have been obvious to a person of ordinary skill in the art would have found it obvious to have used internal ligatures in the device of Xavier et al. The motivation to do so would have been to offer an alternative and equivalent means of securing the ligatures in place with less exposure to the surrounding body tissue and fluid.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xavier et al (US Pat 6063121) as applied to claims 1 above and further in view of Casutt (US PG Pub 2003/0045939).

Regarding Claim 10: Xavier et al. teach a prosthesis with anchoring plates. Xavier et al. does not teach a groove on each of the anchoring plates in contact with the elastic body, said grooves oriented parallel to each other. Casutt teaches an artificial intervertebral disc with a groove in each plate, said grooves being concentric to each other, therefore parallel. See the drawing below.



At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the grooves found in Casutt's device in Xavier et al.'s prosthesis. The motivation would have been to provide an additional means of securing the elastic body to the plates in order to prevent slippage between the elements.

Claims 12 through 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voydeville in view of Xavier et al (US Pat 6063121).

Xavier et al. teaches a similarly claimed prosthesis as stated above. Xavier et al. does not teach a prosthesis with an auxiliary ligament nor a method of attaching the

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ligament to the prosthesis. However, Voydeville teaches an auxiliary ligament/flexible ligament (Figure 7 Element 2) and a means of engaging said auxiliary ligament to one or both of the anchoring plates (Figure 7 Elements 3 and 5). Xavier et al. and Voydeville are analogous art because they are concerned with the same field of endeavor, namely intervertebral prostheses. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Voydeville's ligament in Xavier et al.'s prosthesis. The motivation would be to offer a less invasive approach to securing the device by attaching the extra ligament (Figure 7 Elements 3 and 5) to the lateral hooks of the device and to the vertebrae.

Regarding Claims 15 and 16: Xavier et al. teaches two lateral hooks/anchoring loops (Figure 3 Elements 36 and 60).

### ***Correspondence***

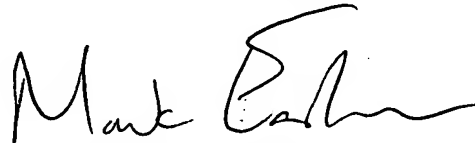
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexis M. Wistermayer whose telephone number is 571-272-1197. The examiner can normally be reached on Monday - Friday 8 am - 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMW 8/6/07

A handwritten signature in black ink, appearing to read "Mark Eashoo". The signature is fluid and cursive, with a large, stylized "E" and "H".

MARK EASHOO, PH.D.  
SUPERVISORY PATENT EXAMINER

06 / Aug 07